

Set - Guided belt measuring system Silent Move light WDGMEMZ

For heights up to 54 metres



- Measuring set for easy installing the belt on existing brackets in the elevator shaft.
- Quiet and non-slip digital shaft copying for universal mounting on a lift cabin
- Use up to speeds of 4 m/sec.
- Particularly quiet and smooth-running, thanks to special belts and low-noise suspension.
- User-friendly, reliable alternative to switches and sensors.
- Accuracy in the shaft:
 - Incremental encoder WDG58B
up to 0.08 mm/pulse at 5,000 pulses
 - Absolute encoder WDGA58B multiturn, with CANopen interface: 4,096 steps/turn and 262,144 (18 bit multiturn) turns or SSI interface: 4,096 (12 bit) steps/turn and 8,192 (13 bit multiturn) turns
- Quick and easy mounting with our complete belt fixing and tensioning set.

www.wachendorff-automation.com/silent-move

The quiet **Silent Move** belt shaft copying devices are systems which are installed quickly and easily in the shaft.
All installation components required for standard installation to the lift cab rail or on the wall are supplied.



Put together your own system for shaft copying, by selecting an encoder and specifying the length of the special belt.



Incremental encoder
WDG58B



Absolute encoder
WDGA58B



Self-guiding special belt for exceptionally quiet, non-slip measuring with noise-reducing wheel.

Calculation of the limit frequency:

$$f_g \text{ (Hz)} = \frac{\text{Pulse number of encoder (PPR)} \times \text{max. speed (m/sec)}}{\text{Circumference of pulley (m)}}$$

Example:
 $f_g \text{ (Hz)} = \frac{2,500 \text{ PPR} \times 1.6 \text{ m/sec.}}{0.3564 \text{ m}} = 11,223 \text{ Hz}$

Calculation of resolution in the lifting hole:

$$\text{Res. in pulses/mm} = \frac{\text{Pulse number of encoder (PPR)}}{\text{Circumference of pulley (mm)}}$$

Example:
 $\text{Res. in pulses/mm} = \frac{2,500 \text{ PPR}}{356.4 \text{ mm}} = 7.01 \text{ p/mm} \hat{=} 0.14256 \text{ mm}$

Ordering information - Guided belt measuring system WDGMEMZ:

Description:	Order No.:
<p>System (without encoder): Belt pulley, 2 tensioning rollers, encoder attachment, attachment of the belt in the shaft, tensioning device and fixing for the belt. Please order the special belt separately. (see below: Silent Move special belt, calculation of length)</p>	WDGMEMZ
<p>Incremental variants</p> <p>System with incremental encoder 58B600ABNH24K3: For a accuracy of measurement of 0,594 mm or 1.684 pulses per mm with a limit frequency of 6,734 Hz and a cab speed of 4 m/s. Encoder type 58B58B600ABNG24K3: pulse number: 600 PPR, channels: AB and zero pulse, G24: 10 up to 30 VDC, channels push-pull, K3: lead outlet 2 m cable, radial</p>	WDGMEMZ58B600ABNH24K3
<p>System with incremental encoder 58B1000ABNH24K3: For a accuracy of measurement of 0.354 mm or 2.8 pulses per mm with a limit frequency of 11,223 Hz and a cab speed of 4 m/s. Encoder type 58B1000ABNG24K3: pulse number: 1,000 PPR, channels: AB and zero pulse, G24: 10 VDC up to 30 VDC, channels push-pull, K3: lead outlet 2 m cable, radial</p>	WDGMEMZ58B1000ABNH24K3
<p>System mit inkrementalem Drehgeber 58B2500ABNH24K3: For a accuracy of measurement of 0.14 mm or 7.01. pulses per mm with a limit frequency of 28,058 Hz and a cab speed of 4 m/s. Encoder type 58B2500ABNH24K3: pulse number: 2,500 PPR, channels: AB and zero pulse, H24: 10 VDC up to 30 VDC, channels push-pull, K3: lead outlet 2 m cable, radial</p>	WDGMEMN58B2500ABNH24K3
<p>Define your incrementalen encoder: With the aid of the calculation forms for limit frequency and resolution in the shaft and the data sheet WDG58B. All variants defined except optional shaft sealed to IP67.</p>	WDGMEMZ58BXXXXYYZZSC8
<p>Absolute variants WDGA58B CANopen or WDGA58B SSI</p>	
<p>System mit absoluten Drehgeber Multiturn mit CANOpen CiA 406 Schnittstelle: For a accuracy of measurement of 0.087011718 mm or 11.49 steps/mm. Binary code: 4,096 (12 bit) steps/revolution and max. 262,144 (18 bit) revolutions. 10 VDC up to 30 VDC, clamping flange, 5 pin. connector, radial, 10 m bus line with connector and female connector, T-junction, termination resistor</p>	WDGMEMZ58B101218COAB00CB5
<p>System with absolute multiturn encoder with SSI interface*: For a accuracy of measurement of 0.087011718 mm or 11.49 steps/mm. * Gray Code (G)/Binary Code (B): 4,096 (12 bit) steps/revolution and 8,192 (13 bit) revolutions. 10 VDC up to 30 VDC, clamping flange, lead outlet 2 m cable, radial</p>	WDGMEMZ58B101218SIAX01L3
<p>Comprehensive technical information on WDGA CANopen / WDGA SSI www.wachendorff-automation.com/wdga58bcan / www.wachendorff-automation.com/wdga58bssi</p>	X = G or B
<p>Silent Movelight special belt: Calculation of the length: Transport height + 5 m (extend accordingly for transition points)</p>	
20 m	WDGZR020
35 m	WDGZR035
50 m	WDGZR050
60 m	WDGZR060
80 m	WDGZR080
360 m-drum	WDGZR360
Special belt (XXX = figures in metres)	WDGZRXXX